
ZXAppeal

Dec. '85

Newsletter of the

\$ 1.50

VANCOUVER SINCLAIR USERS GROUP

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*
* Next Meeting *
* *
* *
* Killarney Community Centre *
* 6260 Killarney st. Vanc. *
* *
* Dec 13 7 PM *
* *
* *
* *

* In this issue:

* We increase your memory.

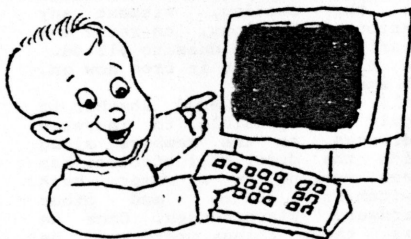
* The Zeeper speaks...

* Bob keeps his ear to the ground.

* Arbie shows us some odds and ends,

* and, we compute The Answer.

ZXAppeal is a monthly newsletter put out by the Vancouver Sinclair Users Group. For more information on the club and ZXAppeal see the backcover. In order to 'beat the deadline' material for ZXAppeal may be send directly to the editor 2308 Marine Drive West Vancouver. B.C. V7V 1K8. Marcio Vieira 'the Pres.' can be reached at 984-8893



And one of those QL's
and that monitor, and a
printer and I wanna
diskdrive and a....

EDITORS PREAMBLE

So here it is guys, December, in case you had not noticed, and get this, our next meeting falls on Friday Dec. the 13th.

No it is not an omen, Sinclair wise that is, I don't know about you personal.

Zeep,s back and he wrote a little pome? Poom? Ah right, poem. It started me thinking. How about the great Sinclair limerick contest, the winner gets to take the Zeeper out for lunch at his fave greasy spoon.

I'll start it of by ripping the Zeep himself off, I mean I am a computer tech right I don't worry about the Zeeps little escapades right?
Right.

There once was a hacker named Darryl,
Who ignored the old Zeep at his peril.
The Zeeper he thought,
is a bit of a fraud,
Until his smoking ZX showed his error.

Yes I know, it rambles, so send me something better already.

Down to business.

The Nov. meeting was full of it, business that is. It was decided at the meeting, without any serious objections, to raise the yearly membership dues to \$15.00. So that's what it is from now on, 15 smackers.

Wilf Rigter wondered whether it would be possible to increase services to the members along with the dues. Wilf ofcourse has been working on a memory bank switching scheme and other hardware clevernesses. Once he has these things perfected he will put on a little presentation at one of the meetings.

Things like that are what services to the members are all about.

At the meeting Bob Denison and Ken Abramson showed us the intricacies of soldering while Karl Brown showed of the robot build in his class. These are services.

And let us not forget, writing articles, or devilishly clever SHORT little programs, for publication in Your newsletter, those are services too. So eh, when are You going to start servicing.

John Brohman told us that the Frog Hollow, Beach and Poco bulletin boards can be accessed by ZX81,s with modems and that these boards have ZX compatible files on em for downloading. Go to it guys and aside from down, do some up loading as well will you.

As mentioned Karl Brown was at the meeting and he brought some slide impressions with him from the Pacific Robot show which he attended. Over all he was not too impressed with the hardware displayed at the show especially when one considers the "bang per buck" ratio. In other words there where some semi impressive pieces of hardware to be seen but the price of these things was downright oppressive.

He is working on it.

With BERT.

BERT is the Basic Educational Robot being built by the students in Karl,s robotics class and he was shown to us at the meeting. Some of the student members brought along there particular versions of BERT and all in all it seemed to me as if the BERTS had a ball.

Cont. Page 4

JUST CHITCHATING...

with Marcio V.

Louis, some time ago, got himself a 64K Rampack. On using it he found that he had no more memory than before. Very diligently he put together a Basic program to check every memory address in his Rampack, ran it, and waited for his ZX 81 to do its job. The ZX-81 is not what we would call a very fast machine in Basic and at the time I was left with the impression that Louis ended up going to bed without seeing the end of his program. Next morning he got on the phone and asked me to put together a Machine Language routine so he could check his 64K rampack without falling asleep in the process.

I had fun doing it but it was not really necessary. What was happening was that the ZX-81 was designed with no idea that more 16K of Ram would ever be used. When the machine is switched on it only checks how much memory is available up to a maximum of 16K, the last possible address being 32,767, and that being the case, sets Ramtop at 32768, and builds the stack down from there. It does not matter if you have more memory, because the computer will ignore it unless...we force it to recognize it by poking in the new Ramtop and entering 'NEW'. This last step is very important as the command NEW not only will test every memory address up to Ramtop, clearing any existing program in the process, but it will also relocate the stack. After NEW if your Ramtop has changed then there is a malfunction at that new Ramtop address. Just "PRINT PEEK 16388+256*PEEK 16389" and you will have your Ramtop or the first not available address. Just keep in mind that, without a hardware modification, you can store data above 32K, but cannot access machine language stored there. Also the program cannot be so large that will push the display partly above 32K...

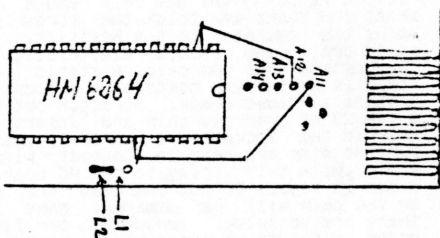
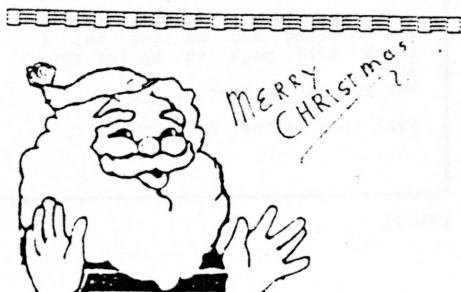


FIG 1

INCREASE YOUR MEMORY... Marcio Vieira

The HM6264 is a 8Kx8 static 28 pin Ram chip that can be used to replace the 1K or 2K memory chip that comes with your ZX-81 or TIMEX 1000. The most difficult part is to remove the existing Ram chip or chips if they are soldered in. The easiest way to do it is to say goodbye to those Ram chips, clip off the pins and then desolder them from the circuit board. (During the forthcoming meeting there will be a session on soldering, that could be usefull for newcomers to hardware projects. If you have no experience do not start this project).

Open the casing. Remember to keep track of, on opening it, where the long and short screws come from. They must go back the same way. Gently pull out the keyboard connecting strip. DO NOT bend it or crease it. Face the top of the circuit board (where the chips are), with the edge connector away from you. If your computer has 5 chips, remove the 2 small chips on your right side. If it has only 4 chips, remove the chip on your right. It is on this very right location that the new chip is going to be installed. If you have there a small 18 pin socket, instead of removing it, install two 14 pin single-in-line sockets. RPE has the SIP sockets, CA-143TL-TSD, that I do believe, will fit there nicely. If you have there a 24 pin socket you may be able to add 8 pins, by sawing off 8 pins from another socket. Myself I went through a lot of grief by desoldering the existing socket. On the right side of the socket there are 3 holes, marked with L1 and L2. If not done already, connect center to lower (L2), as shown in fig.1, with a small wire.

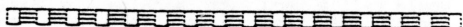
Cont. next page

Before handling the new chip remove your shoes and socks and touch the screw that holds the regulator to the heatsink. This should drain any static electricity, that can destroy your new chip. A static wrist strap is better, and costs only a couple of dollars at Radio Shack. Stretch out pins 2 and 23 of your new chip and insert the chip in the socket, very carefully, making sure no pins are bent in. Connect pins 2 and 23, with thin wiring, to the PC board, as shown in fig.1. Do not overheat the pins or the chip will be damaged. Make sure there are no solder 'bridges' or little drops of solder on the circuit board. If you now connect the power, and everything is OK, you should get the K cursor. If not, search for shorts created by excess solder, or a lifted or broken circuit line, caused by excess heat. Close the casing, taking care, not to damage the keyboard connecting strip. It may help, when inserting it, to hold it with 2 narrow strips of cardboard or, even better, two wooden Popsicle handles. If necessary the strip can be trimmed with a pair of scissors.

You have now 8K of Ram, located from 16K to 24K. It could be made to switch, when desired, into the 8K to 16K slot, where it would not be affected by reset. It is a fantastic place to store Machine Language programs. The SYNC magazine March/April 1984 (The great Ram rescue) showed how to do it, and xerox copies of that article can be arranged at cost. The connection to the 8K chip is made at pins 20 and 22. Some add on hardware use addresses in the block 12K to 16K, therefore making it desirable to disable the chip when a call is made to that block of memory. A modification to the schematic of that article is shown in fig.2 that does exactly that. Take care and...Good Luck...

If you would like your memory to be non volatile use the "smart socket" available from Active Components.

The "smart socket" has a built in backup battery and the necessary circuitry.



From Page 2

I have also mentioned before that Ken A. and Bob D. put on a soldering/desoldering show and it was fun. Don't ask me to repeat here what was discussed it is too much. It had to do with acid cored tin/lead alloy soldering wire and 200 watt soldering irons.

The latter you apparently ought not to employ on your ZX PC board because it turns it all smelly and black in no time flat.

Maybe I can talk Bob or Ken into putting the highlight of their presentation on paper.

Anybody else need some broad hints? I got lots more where this one came from.

Well that was pretty well it for the meeting and as for me, I think I'll pack it up for this issue.

See you at the meeting.

Paul (the editor) Ruiterman.

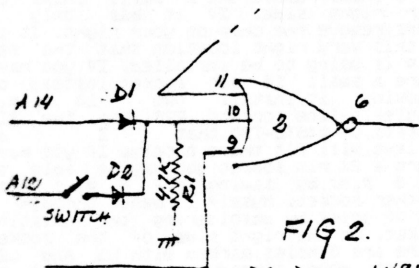


FIG 2.

D1, D2 1N914 OR EQUIV.
R1 APPROX. 5K

THE ZEEPER SPEAKS...

Yes folks I'm back. I have been across the pond for the last several months and I'm sure you have heard of my adventures. I figured the only way to stop this Sinclair fanaticism was to go straight to the source. Merry olde England is a wonderful place. Over there they use real computers like the AMSTRAD which are well supported and delivered off the shelf.

I arrived in the nick of time. Your omnipotent Sir Clive had managed to bungle the management of the company so badly that it was millions in debt. Just like Timex had David Higgenbottom, Sinclair had Bob Maxwell. It seems that Mr. Maxwell had, unbeknownst to him, a Ferranti chip secretly implanted in his brain. He thought that purchasing Sinclair Research was a good idea.

Let me tell you I had my hands full this time. This chap Maxwell had lots of money unlike Higgenbottom who just had lots of ideas. The only way I could stop this demented man was to enlist the forces of Cooper and Lybrand. This is a world renowned accounting firm which has the reputation of being the undertakers of the business world. They took one look at the books and products of Sinclair Research and gave a resounding thumbs down.

Folks let me tell. When Cooper and Lybrand touch you, it's the kiss of corporate death. Absolutely nobody can save Sir Clive now. He's finished, kaput, crashed. It's just a matter of time. I have finally won. There won't be anymore Sinclair computers. Even England has given up on the QL. In North America it has been the subject of reveals that even embarrassed me.

What is to become of all of you faithful disciples? I'm sorry to say that you'll probably be put in the same category as Easel collectors. Some of you will be enlightened enough to invest in an AMIGA which is a real computer, but the rest of you? I'll get you one by one. A failed chip here, a dead rampack there, the occasional voltage spike.

I will continue to entertain you with various stories of user misadventures from time to time. For instance I even have a little poem for you this time.

There once was a hacker named Darryl
Who ignored my pleas to his peril.
The Zeeper he thought was a joke
until his 2068 went up in smoke.

Portugal TC 2068 REVIEW

by R. Lussier

This computer is actually a Spectrum in 2068 clothing. It has the same case and keyboard but the insides were changed.

To start off with the Sound is about three (3) times louder than the TS 2068, the keyboard is tighter and more responsive with clicking keys and also the space bar is usable all the way across. Not dead on each end as the TS 2068 is.

The main board uses the ZX Spectrum signals and it has the Spectrum Edge-connector in the back, no more Twistor boards or Z-Links to attach. No more ROM switches or Emulators, and no more Push-Up boards.

The Video and the color in the TC 2068 is very clean and sharp, more like a monitor.

Some of the Spectrum programs which I could not load on TS 2068 without the use of the Push-Up board, loaded with no problem as is. This is the machine that TimeX should have brought out in the first place. It has the best of both worlds, the TS 2068 and Spectrum. This computer rates highly in my estimation.

I am also using the new ZX LOG INT III Interface (parallel) with a Brother HRS printer and it is connected directly to the computer, no Z-Link, etc. This interface has all the commands on EPROM not software. It has the LPRINT, LLIST, & COPY commands built-in and does beautiful Screen Graphic dumps.

Both of the above can be obtained from:-

The EMC,
15 Kilburn Court,
Newport, RI 02840



2068 and Spectrum Software

by R. Lussier

This program is for the ZX Spectrum and it is a Utility. It is called "LETASET".

This program lets you do 18 different FONTS. You can use it in your programs, for more stylish title SCREENs, clearer listings to your TS2040 printer merge into your word-processors and use a lettering style for just about any occasion.

This is a User friendly & very useful program that works very well. It also has a DEMO program which demonstrates all the 18 different styles.

Usefulness: 92%
Money Value: 90%
GETTING STARTED: 95%
OVERALL RATING: 92 1/2 %
COST: 25 + 21.50 postage

Eclipse Software,
79 Ardrossan Gdns.,
Worcester Park,
Surrey KT4 7AX,
England

PLAYING WITH ELECTRICITY # (x) (Harvey Taylor)

Well I finally got my printer. You will just have to put up with my messing around with different typesyles. Between Quill and the LX80, there are a lot of different combinations to try.

In the last column I managed to get to Paul before the deadline (sigh). I posted some results of the Sieve of Eratosthenes in Superbasic and 68008 Assembler. Now that I have my printer, I can get the code on paper & so here it is. Any of you who may be experienced 68K hackers may see ways to optimize the code. The 'GET FLP2_standard_hdr3' line at the beginning is an instruction to the assembler to get the file which contains all the QDOS system calls & values. (Well most anyway, I'm adding them as I use them & there are 150+ QDOS calls documented.)

By the way, that reminds me. Anybody who is going to get into some serious programming will find ADRIAN DICKENS' "QL ADVANCED USERS GUIDE" invaluable. There is also available from Boston Sinclair, The QL Technical Guide, (US\$20.00 + shipping) which has some additional information.

Also by the way, if this article should happen to fall into the hands of any other QL owner, drop me a line. I'm trying to maintain contact with as many QL'ers as possible.

Back to the listing, as you see, most of the nonensential code consists of system calls (via QDOS, QDOS_N, VECTOR, & VECTOR N). This makes it easy to do the simple sorts of housekeeping things that always need to be taken care of. . . . BUT, IT MEANS YOU GOTTA DO IT THEIR WAY. WHICH IS OKAY IF 'THEY' HAPPEN TO BE GOING YOUR WAY. (EXCEPT HOW OFTEN DOES THAT HAPPEN?)

THERE is a direct correlation between the assembler listings and the basic code of last time which will give you an idea what the code is about, label by label. GET IN TOUCH WITH ME IF YOU HAVE QUESTIONS.

```
RD_TIME      QDOS_N  MT_RCLCK,1
             LEA     BUF_TOP(PC),A1
             SUBA.L  A6,A6          * zero A6 for CN_DATE
             VECT_N  CN_DATE,A2
             MOVE.W  (A1)+,D2
             MOVEQ   #-1,D3
             LEA    SCR_CHAN(PC),A0
             MOVE.L  (A0),A0
             QDOS   IO_SSTRG,3
             BNE    ERROR
NEWLINE      MOVEQ   #-1,D3
             QDOS  SD_NL,3
             RTS
SND_MSGC     LEA    MSG2(PC),A1
SENDIT       LEA    SCR_CHAN(PC),A0 * RETRIEVE CHANNEL #
             MOVE.L (A0),A0
             VECTOR UT_MTEXT,A2
             RTS
*
MSG2         DC.W   M2END-M2
M2           DC.B   'COUNT='
M2END
*
MSG1         DC.W   M1END-M1
M1           DC.B   'SIEVE OF ERATOSTHENES',10
M1END
```

```
SCR_CHAN    DS.L   1
SCR_PAR     DC.W   $0401
            DC.W   $0004
            DC.W   384
            DC.W   128
            DC.W   64
            DC.W   32
*
BUFFER      DS.L   30
BUF_TOP     ADDR
ADDR        DC.W   06
CON_BUF     DS.L   2
STACK       DS.L   4
STK_TOP     END
```



```
#####
#
#           ZSTRAS          #
# previously: Colour Corner #
# written by: W M Cartny   #
#                           #
#####
appearing: January edition
```

So the Zeeper got our good friend Daryll I see. He could have avoided that misfortune by having a LED light installed on his 2068 that indicated that the power was on. Consider doing the same, you may avoid meeting up with the Zeeper.

*** ARCHON: Spectrum 48K, Sp. +

Thank you Electronic Arts, at last you have presented us with the game that has changed the way people play strategic games. If I have not played Archon on any of the , ahem, other computers yet, try it on them if you do not have a Spectrum. You wont find much difference.

You are positioned on a chess board, the light vs. the dark, and you choose an icon and the computer does the same. They are moved into position to do battle on a different screen, each battle is quite a challenge. The graphics are , how would I put it? I guess you would call them, different. Very addictive, an overall good game.

Ratings:	Graphics	EEEE
	Addictive	EEEEE
	overall	EEEE

address Goodbyte(zx),
94, Leather lane,
London Ecl

Archon ... £7.50

BEATING ARCHON: 11 HELPFUL TIPS

1. If you want to learn the game quickly, play the computer not an opponent.
2. Learn to shoot diagonally, it increases the firing range.
3. Play aggressively and plan your attack.
4. Learn the characteristics of each icon.
5. Icons with slow shots should close in on their opponents.
6. Icons with quick shots should stay away from their opponents.
7. Time your attacks and counters keep moving.
8. Use barriers. Race around them to put distance between you and the pursuing icon.
9. Keep your icons spread out so they can be in position to attack.
10. Move your icons onto squares of favourable colour as quick as you can. Teleport one of your heavyweights onto the opponents icon so it cannot move off of an unfavourable square.
11. Move strong icons close to power points and wait until the luminosity cycle is in your favour, then try to take th m.

REVIEW: SPECTRUM 128K

by R. Lussier

The 128K's code name Derby has been launched in Spain and will be available in the Spring in Britain.

Essentially two computers in one. When turned on the 128K mode is on automatically, but type SPECTRUM and it becomes a 48K Spectrum Plus, completely compatible with all the existing Spectrum Software. The UK model will sell for about £150.

The 128K looks like a Plus with a big heat sink bolted on the righthand side, and separate Keypad attached to the computer by a coil-cord into the front of the Spectrum.

A full range of ports have been included. There is an RS232 socket, MIDI Sockets for musical instrument hook-up, reset switch RGB/Composite socket, TV socket the tape leads on the left hand side, and the edge connector in the usual place. A Sound-Chip as on the TS 2055, sound through a TV speaker & adjustable.

In the 128K mode the Key-word system is not used. They are entered one letter at a time but retained in the 48K mode. The 128 has the capacity to act as a RAM disk. That's a facility whereby areas of RAM can be set aside to store a suite of programs or sets of data in much the same way as on Microdrives. Access to files on RAM disk is almost as instantaneous. As an example the command 'CAT' produces an instant catalog of RAM files. There is still no sign of a Joystick port.

There may be a few changes before it appears on the British market scene. It looks to be a strong base model for the new Sinclair range including the new portable PANDORA and the desktop ENIGMA.

The new Spanish version of the Spectrum 128K computer now available.

The price for this new computer is U.S. \$270.00 including postage & Insurance. It is now available from:-

The EMC,
15 Kilburn Court,
Newport, RI 02840
U.S.A.

INTERNATIONAL USER'S

by R. Lussier

These are addresses of some Sinclair User's wishing to contact other User's Worldwide. If interested please don't hesitate to contact them.

ZX81 CLUB

Lain Dale,
78 Cobden St.,
Thornaby,
Stockton on Trees,
Cleveland TS17 7ET,
England

Strathclyde Club

Ian Kennedy,
24 Waverly Crescent,
Lanark, Scotland

SPANISH CLUB

Jose Manuel Martin Santos,
Spdo 635, Castellon,
Spain

PENPALS

G. Bentham,
PO Box 73,
Ngodwana,
N.E. Transvaal,
Rep. S. Africa 1209

Pajard Jerome,
57 Rue Segoffin,
92400 Camberois,
France

Owen O'Connor,
Downings North,
Prosperous,
Co. Kildare, Ireland

2068 KEYBOARD OVERLAYS

by R. Lussier

There is a company which has plastic keyboard overlays for the 2068 called "QUICKKEY 2068".

- The different overlays are:
- (1) "TASWORD II/TASPRINT"
 - (2) "MSSCRIPT"
 - (3) "BLANK"

The price is U.S. \$3.99 for the first two and \$3.00 for the Blank. These give you commands at your fingertips. A very useful product. Any two for \$7.50+ 50 cents postage. These are now available from:

AN-TO Products,
9009 W. Elm St., #2,
Phoenix, AZ 85037
U.S.A.

REVIEW: Spectrum Software

by R. Lussier

The Way of the Exploding Fist

This is a Karate simulation game and is controlled by the keyboard or joystick.

The program starts off with a DEMO mode and you can enter the real program at a press of a key. You have 18 different moves, such as Flying Kick, High Kick, Mid Kick, Short Jab kick, Sweeps, Roundhouse, High Back kick, Punches, Jab & Low, Forward & Backward Somersaults.

The graphics are very well done including the shadows done ZAXXON style and the animation is very smooth. There are different screens of action and is one of the best Sporting type programs I have seen. There is also a 1 or 2 player mode.

2068 PRODUCT GUIDE

by R. Lussier

- (1) The WAFADRIE system with the RAINBOW emulator plus Spectrum Bus interface priced at U.S. \$175 + \$5 Post from the Damco Co., 67 Bradley Ct., Fall River, MA 02720
- (2) A new Canadian co. has 2 new software titles called "CHARACTER FONT GENERATOR" at \$25 and "ADVANCED VIDEO MODES", a utility that uses the 2068's Dual Screen and the Extended Color and 64 Column modes at \$15 (Canadian). From Beaver Computer Prod., 999 Munroe Ave., Winnipeg, Man. R2K 1J4
- (3) T/S Connections, 3832 Watterson Ave., Cincinnati, Ohio 45227, U.S.A. have a Stereo Jack for the 2068, LED Power Indicator and a Power supply switch for the T/S 2040 printer. They also repair Timex computers. Write for more information.
- (4) A program called "Greeting Card Designer" which is like ATARI's "Print Shop" and is priced at U.S. \$20 from Zebra Systems, 78-06 Jamaica Ave., Woodhaven, NY 11421.
- (5) T/S 2040 printers for sale at U.S. \$38.88 from BNF Enterprises, 119 Foster Street, PO Box 3357, Peabody, MA 01961

GRAPHICS: 95%
MONEY VALUE: 90%
EASE OF USE: 90%
OVERALL: 91.5%
PRICE: 28.00 inc Post

Bargain Software,
Unit 1,
1 Esmond Road,
London W4 1UG,
England

NEW Sinclair Products

by R. Lussier

The first product is the famous "QL". The new price of this computer is U.S.\$299.95 + \$8.00 Postage. This is a great price for a 128K computer.

The second product is the "Flat Screen-TV". The price on this product is U.S.\$99.95 and \$2.95 for Postage.

These items if you are interested are available from:-

CURYR COMPUTER,
5044 West Banff,
Glendale, AZ
85312-5507
U.S.A.

D.ROSS Educational Electronics
Hardware & Software Support

●●●<<Upgrade NOW!!>>●●●
DO IT YOURSELF Specials:

WIRE a Full Travel KEYBOARD
with instruction for 1000, 2068
.....14.95 & up

DO IT YOUR WAY:Uncased T/S 1000
for custom keyboard,case & power
supply NEW,unused!!.....29.95

SWITCH to a Switching
POWER SUPPLY 5v@1.1 amps,-5@.2,
12@.3; 24x5" PCB, complete with
adapter. NEW.....19.95

EDUCATE Yourself!...KITS, Books
Schematics & PLANS available

COMING SOON! Enquire-QL \$599.95!
8Kx8 CMOS STATIC RAMS under \$10

Mail-D.ROSS Electronics
1-2475 Manitoba st.
Vancouver V5Y-3R4
Leave msg. Anytme.....298-9245

The QL Price Reduction

I have just received the word from Sunset Electronics, 2254 Taraval St., San Francisco, CA 94116 that Sinclair has just reduced the price of the new QL from US\$499.00 to US\$299.

If you would be interested in more information on the QL, then contact them.

Another dealer that will have the QL is The English Micro Connection, 15 Kilburn Court, RI 02840. Both are very good & also reliable dealers.

The New QL II by R. Lussier

A new version of the QL may be on the way, this is according to sources close to Sinclair Research.

The new machine based on QL technology, is most likely to have 1/2 megabyte of RAM, & it may offer one in-built Disc Drive instead of the two Microdrives. The full versions of the 4 Psion packages may also be available in ROM on board the computer.

There is not a hint of the possible price, but if it is now launched the recent cut of the QL to \$199 will leave a nice niche at the old \$399 level.

```

1 REM *****
  ** LIGHT SHOW **
  *****
  FOR SPECTRUM

000 REM Load a Music Cassette
    as you would load a
    program and watch the
    LIGHT SHOW.

004 REM Contributed by
    R. Lussier

006 CLEAR 20000: BORDER 0: PAPE
M R 10: INK 7: BRIGHT 1: CLS
10 FOR f=0 TO 113: READ a: POK
(30000+f),a: NEXT f
(31000+f),a: NEXT f
(31000+f),a: NEXT f
PRINT AT 0,0;" PLAY MUSIC
IN TO PHONE AT 1,5;" AS IF Y
LOADING": PRINT AT 21,0;
"HI 1";
PAUSE 0: INK 0: CLS
007 RANDOMIZE USR 31000
008 DATA 33,15,88,6,11,197,84,9
009 DATA 6,16,83,205,108,117,203,191,20
010 DATA 167,203,175
011 DATA 119,18,43,19,16,239,60
012 DATA 81,32,252,199,16,224,1,90
013 DATA 108,147
014 DATA 19,90,125,18,27,35,11
015 DATA 177,254,32,245,201,14,0,2
016 DATA 119,40,4
017 DATA 203,193,24,2,203,129,2
018 DATA 119,40,4,203,201,24,2
019 DATA 210,254,203,119
020 DATA 40,4,203,209,24,2,203,
145,219,254,203,119,40,4,203,119
021 DATA 241,24,2,203,117,121,2
022 DATA 0,127,127,127,127,127,
023 DATA 0,17,203,33,24,121,1,8,0,
024 DATA 1,2,203
025 DATA 1,2,203,82,1,237,163,33,2
026 DATA 0,88,1,191,2,62,0,119,1
027 DATA 144,215,11,120,177,194
028 DATA 9,0,118,11,120,177,194
029 DATA 0,0,203,254
030 DATA 300,200,100
031 DATA 120,121,205,48,
117,195,76,121,201,201

```

NEW PRODUCTS: TS + TC 2058
by R. Lussier

TS2058 Computer Package: - This package contains the following: complete TS2058 computer system, a TS2040 Printer with paper, one Cartridge program, (3) three Cassette programs, all for U.S.\$149.95. This is a STEAL. Anybody wanting to purchase a TS 2058, this is the now time.

MODEM HACKERS HANDBOOK: For the members who have the TS2050 new Modem. Price is US\$16.95.

TS2040 Power Saver: This switch has an LED light that installs right into your 2040 case. This requires drilling a couple holes in the printer case & soldering a few wires. Price @ US\$9.95.

BACK-UP COPIER: This is an Interface unit needing two tape decks Two LED indicators allow you to adjust volume for optimum performance. It works on the TS2058 ZX Spectrum, TS1000, & ZX81. The price is US\$19.95. This has to be a good unit by the sounds of it.

84 COLUMN DISPLAY 2058 CARTRIDGE

This is the unit promised by Timex before the Let-Down. This is for large printers not the TS 2040 printer. Price is @ US\$29.95.

TS 2058 BOOKS - Special

This special consists of the following three (3) books- "Inside the Timex 2000 Computer" "Begin./Intermediate Guide" "Inter./Advanced Guide" for the price of US\$9.95.





MEXICAN 2068 USERS GROUP

This group is looking for other Users to contact. If you are interested, contact :-

German Valero,
Mariano Azuelo 255,
Santa Maria la Ribera,
Mexico D.F. 06400

TS 2068 MUSIC BOOK: - A Must

"30 Music Programs for the TS 2068" is a 167 pages of music programs & explanations. Uses both the BEEP & SOUND commands. Music has up to 4voices. This is priced at US\$12.95.

All the above can be obtain from:-

E. Arthur Brown,
3404 Pawnee Drive,
Alexandria, MN 56308
U.S.A.

Ask for their great catalog,
it's FREE.

ZX81-TS1000 Software Addresses

by R. Lussier

The following addresses are for obtaining some new tape programs for the above computers:-

- (1) "ZX Hi-Res Toolkit"
@ £6.00 + postage

Stefan Schmidt,
Lindensestr. 5,
50990 Ruesselsheim 5,
West Germany

- (2) "Bridgehead"
@ £3.00 + Postage

G. Parker,
12 Fleming Field,
Shotton Colliery,
County Durham DH6 2UF,
England

- (3) Three programs for £6.00 + Postage. The three programs are: (1) BARON (2) Dungeons of Doom (3) Admiral Graf Spee

Temptation Software,
27 Cinqe Ports St.,
Rye,
East Sussex, England

- (4) "Extended Basic" @ £4 + Post

FUG Beniest,
Linnaeusstraat 16,
Den Haag, Holland

- (5) "TINY LOGO" (no price listed)

International Publishers,
3948 Chesswood Drive,
Downview, Ontario M3J 2W6
Canada



ODDS AND ENDS

John Brohman bought a new printer and called me because he was having troubles getting it to work with his Memotech Centronics. Seems his old co-op's Epson worked just fine but since he changed address he had to spring for his own and it was not quite so co-operative. Anyway, this caused me to resume my search for the answer to my (and now John's) printer problems. Via a tip from John the search lead to Fred Nachbaur in Nelson and I might add the point to this story. Fred and a couple of others are involved in a cross-continental publishing venture called SyncWare News and a new quarterly called MemoNotes. Fred was nice enough to send a copy of each. SyncWare News is a good publication catering to the technical side. Lots of hardware and software projects and lots of digging into the ROM to figure ways around ZX shortcomings. MemoNotes does basically the same thing for Memotext and Memocalc. Fred has several modified software versions of Memotext one of which uses Powell Hargrave's SDS fastloader program to really speed things up. MemoNotes costs US\$13.95 (four issues) and SyncWare Notes costs US\$19.95 (six issues) and both are available through the editor Tom Bent 9016 Flicker Place, Colombia, MD 21045.

So did all this solve John or my problem you ask? Don't be naive it's never that simple in Sinclair land. John solved his problems by throwing money at them. (he bought a different printer) I now know what the problem is and that it can be fixed or gotten around and maybe someday.... I have been deliberately vague as to what the problem is because explaining what happens would take up to much space but suffice to say that it has to do with the way the Centronics handles linefeeds. If you are planning to buy a full size printer and use the Memotech Centronics make sure the printer has a line feed command which can be toggled to cause a linefeed + carriage return or to cause a linefeed only. Most printers have a toggle on the CR command, not all have it on the LF. This is important because the Centronics only sends out LFs (apparently a nonstandard thing to do). Unfortunately the cheaper machines seem to be the ones to leave this toggle out.

THE ANSWER TO LIFE, THE UNIVERSE, AND EVERYTHING (8 K ROM)

Many people think computers are a black boxes with answers in them, and that programming is a way of extracting answers from the computer. On the TV series, Hitchhiker's Guide to the Galaxy (a BBC production broadcast on PBS), the second greatest computer of all time answers "the" question. It took 7 1/2 million years to run the program to completion.

Fortunately, we had a monkey typing at random on our computer, and it came up with a program which answers "the" question in only a few minutes. I was frankly disappointed with the result. But, anyway, here is the program:

```
1 LET A$="I-SQR I>EXP(-PI*I)/PI**2"  
10 PRINT "ENTER YOUR AGE"  
20 INPUT I  
30 CLS  
40 PRINT ",,,"THE ANSWER TO LIFE,  
THE UNIVERSE, AND EVERYTHING IS ";  
42 LET I=VAL A$ (3 TO 4)  
50 IF VAL A$ THEN GOTO 42  
60 PRINT (STR$ (VAL A$ (6 TO 12)))(3 TO 4)  
70 PRINT "ENTER A FRIENDS AGE"  
80 GOTO 20
```

The answer is, of course, a number. In case you do not believe that there is a number which answers the mysteries of the Universe, I refer you to Martin Gardner's column in the November 1979 issue of Scientific American.

Vancouver Sinclair Users Group,
P.O.Box 788,
New Westminster,
B.C. V3L 4Z8.



The Vancouver Sinclair Users Group has been in existence since 1982. We are a support group for the owners and users of the Microace, ZX 80, ZX 81, T/S 1000, T/S 1500, Spectrum, Spectrum+ T/S 2068 and QL computers.

Our 1985 executive consists of,
President Marcio Vieira
V.P/Coordinator Erik Sakara
Treasurer ARBie Fru

Our Membership dues are only \$15.-/year and may be send to our Treasurer.

ARBie Fru
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V6Y 1J4.

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\$ 40.- per page.
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Our Network coordinator is,
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